

- 1 1. A method comprising:
2 removably supporting a microscope imaging unit on a base;
3 providing a first light coupled to said unit and a second light coupled to
4 said base;
5 monitoring for removal of said unit from said base; and
6 automatically turning said second light off in response to removal of said
7 unit from said base.
- 1 2. The method of claim 1 including determining when said unit has been
2 removed from said base by monitoring contacts between said unit and said base.
- 1 3. The method of claim 1 including providing a graphical user interface that
2 allows the user to enter light control signals and determining whether the user has
3 requested that one of said first or second lights be turned off, and in response to said
4 request turning off the requested light.
- 1 4. The method of claim 1 further including adjusting the light intensity of
2 said first and second lights based on the available power.
- 1 5. The method of claim 1 including monitoring the available power and
2 determining whether to operate either of said first or second lights.
- 1 6. The method of claim 1 including monitoring the available power and
2 determining whether to operate both of said first and second lights.
- 1 7. The method of claim 1 including determining whether said first or second
2 light is on.
- 1 8. The method of claim 1 including turning on said first light in response to
2 removal of said unit from said base.

1 9. An article comprising a medium storing instructions that enable a
2 processor-based system to:
3 monitor for the removal of a microscope imaging unit from a microscope
4 imaging unit supporting base;
5 determine whether said unit has been removed from said base; and
6 in response to the removal of said unit from said base, turn off a light
7 coupled to said base.

1 10. The article of claim 9 further storing instructions that enable the
2 processor-based system to determine when said unit has been removed from said base by
3 monitoring contacts between said unit and said base.

1 11. The article of claim 9 further storing instructions that enable the
2 processor-based system to provide a graphical user interface that allows the user to enter
3 light control signals and determine whether the user has requested that one of a first or
4 second lights be turned off and in response to said request turning off the requested light.

1 12. The article of claim 9 further storing instructions that enable the
2 processor-based system to adjust the light intensity of a first and a second light based on
3 the available power.

1 13. The article of claim 9 further storing instructions that enable the
2 processor-based system to monitor the available power and determine whether to operate
3 either of a first or second lights.

1 14. The article of claim 9 further storing instructions that enable the
2 processor-based system to monitor the available power and determine whether to operate
3 both of a first and second lights.

1 15. The article of claim 9 further storing instructions that enable the
2 processor-based system to determine whether a first or a second light is on.

1 16. The article of claim 9 including storing instructions that enable the
2 processor-based system to turn a light on said imaging unit on in response to the removal
3 of said unit from said base.

1 17. A microscope comprising:
2 a microscope imaging unit;
3 a base removably supporting said microscope imaging unit;
4 a first light coupled to said unit and a second light coupled to said base;
5 a circuit to monitor for removal of said unit from said base; and
6 a control circuit that automatically turns said second light off in response
7 to removal of said unit from said base.

1 18. A method comprising:
2 detecting the on/off state of at least one light associated with a
3 microscope;
4 analyzing an image captured by an imaging unit associated with said
5 microscope; and
6 setting the color balance of said imaging unit at least in part based on an
7 analysis of said image, the on/off state of said light, and the nature of said light.

1 19. The method of claim 18 including detecting the presence of a filter on said
2 microscope, and adjusting the color balance based on the presence of said filter.

1 20. The method of claim 18 including detecting the state of each of two lights,
2 determining the nature of each of said lights and setting the color balance for said
3 imaging unit.

1 21. The method of claim 18 including detecting the on/off state of a first light
2 associated with said imaging unit and a second light associated with a base which
3 removably supports said imaging unit.

1 22. An article comprising a medium storing instructions that enable a
2 processor-based system to:
3 detect the on/off state of at least one light associated with a microscope;
4 analyze an image captured by an imaging unit associated with said
5 microscope; and
6 set the color balance of said imaging unit at least in part based on an
7 analysis of said image recorded by an imaging unit, the on/off state of said light, and the
8 nature of said light.

1 23. The article of claim 22 further storing instructions that enable the
2 processor-based system to detect the presence of a filter on said microscope and adjust
3 the color balance based on the presence of said filter.

1 24. The article of claim 22 further storing instructions that enable the
2 processor-based system to detect the state of each of two lights, determine the nature of
3 each of said lights, and set the color balance for said imaging unit.

1 25. A microscope comprising:
2 a digital imaging sensor;
3 a first light associated with said imaging sensor;
4 a detector to detect the on or off state of said light;
5 an image analyzer to analyze an image captured by said imaging sensor;
6 and
7 a device to set the color balance of said imaging sensor at least in part
8 based on the analysis of said image, the on/off state of said light and the nature of said
9 light.

1 26. A method comprising:
2 automatically turning on a light to expose an object to be imaged by a
3 digital imaging microscope;

4 automatically capturing an image after said light has been turned on; and
5 automatically turning said light off after said image has been captured.

1 27. The method of claim 26 including repeatedly turning said light on,
2 capturing an image and turning said light off until a predetermined amount of time has
3 expired.

1 28. The method of claim 27 including determining whether a preset time has
2 arrived and automatically turning said light on when said preset time has arrived.

1 29. An article comprising a medium storing instructions that enable a
2 processor-based system to:
3 automatically turn on a light to expose an object to be imaged by a digital
4 imaging microscope;
5 automatically capture an image after said light has been turned on; and
6 automatically turn said light off after said image has been captured.

1 30. A digital imaging microscope comprising:
2 a control circuit including a timer to automatically turn a light on to
3 expose an object to be imaged;
4 an image capture device that automatically captures an image after said
5 light has been turned on; and
6 said control circuit automatically turning said light off after said image has
7 been captured.